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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,123	03/05/2002	Martin J. Weitz	AP-001	3566

7590 04/06/2004

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EXAMINER

HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 04/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,123

Applicant(s)

WEITZ, MARTIN J.

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 44-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are two claims numbered 44, and claims 45-58 depend from claim 44. To expedite prosecution, the examiner will examine the application as if claims 45-58 depend from the second claim 44. The first claim 44 will be referred to in this office action as claim 44a and the second claim 44 will be referred to as 44b.

Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al., US 4,178,652 in view of Holmes, US 2,571,575 and in further view of Arant, US 2,919,070.

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Regarding claim 36, Adams teaches a method of cleaning surfaces of an anilox roller (30, Fig. 1) comprising the steps of: providing an anilox roller having surfaces to be cleaned of dried ink and other material residue; providing a source of pressurized steam (42, Fig. 2); wherein said pressurized steam has a pressure of between 50 and 250 psi (140 psi, col. 3, lines 56-57); directing a jet of said pressurized steam from said source onto said surfaces of said anilox roller, thereby removing said dried ink and other material residue from said surfaces of said anilox roller (col. 1, lines 42-47).

Regarding claim 36, Adams does not teach pressurized wet steam; wherein said pressurized steam has a temperature of between 220 and 260 °F and a liquid water content of up to 10%; and directing a stream of liquid water onto said surfaces of said anilox roller to rinse said dried ink and other material residue from said surfaces of said anilox roller.

Regarding claim 36, it has been held that optimization of ranges is not an inventive step. See MPEP 2144.05.

Regarding claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Adams to use steam in the range of 220 and 260 °F. Adams does not specify the conditions of the steam, but the claimed range of temperatures in the instant application is within the range of temperatures that steam encompasses. One having ordinary skill in the art would recognize that it would be advantageous to optimize the temperature range of the steam to provide optimal cleaning while not requiring too much energy or cost to heat the steam, and one having ordinary skill in the art could easily determine through the course of routine experimentation that the optimal range of temperatures for the steam is between 220 and 260 °F.

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Further regarding claim 36, Holmes teaches a steam cleaning apparatus which allows the operator to select a wide variety of steam/water mixes, including 10% water (col. 1, lines 25-34).

Further regarding claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to additionally modify Adams to use a wet steam mixture of up to 10% water, because Holmes teaches that it is well known in the art to use wet steam for cleaning, and one having ordinary skill would recognize the advantages of using wet steam, such as the rinsing effect the water would have on the object being cleaned.

Further regarding claim 36, Arant teaches a method of steam cleaning and liquid rinsing, including: the further step of directing a stream liquid water onto said surfaces after said step of directing a jet of said pressurized steam (col. 8, lines 42-49); a means for directing at least one stream of liquid water (79, Fig. 1) onto said surfaces to rinse away said dried ink and other material residue; wherein said means for directing at least one stream of liquid water includes a source of liquid water, a transport line, and a spray nozzle (79, 11, Fig. 1).

Further regarding claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to additionally modify Adams to direct a stream of water onto the anilox roller to rinse away dried ink, because Arant teaches that it is well known in the art to rinse objects after being steam cleaned, and one having ordinary skill in the art would recognize the advantages of rinsing after steam cleaning, such as removal of any particles that were not sufficiently rinsed away by the wet steam cleaning.

Regarding claim 42, Adams teaches an apparatus for cleaning dried ink and other material residue from surfaces of an anilox roller (30, Fig. 1) comprising: a source of pressurized steam (42,

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Fig. 2), wherein said pressurized wet steam has a pressure of between 50 and 250 psi (140 psi, col. 3, lines 56-57), means for holding and rotating said anilox roller (col. 2, lines 37-42); means for directing at least one jet of said pressurized steam onto said surfaces of said anilox roller to remove said dried ink and other material residue comprising at least one steam supply line and at least one steam jet nozzle (40, 46, Fig. 2) (claim 42).

Regarding claim 42, Adams does not teach a temperature of between 220 and 260 °F and a liquid water content of up to 10%; means for directing at least one stream of liquid water onto said surfaces of said anilox roller to rinse away said dried ink and other material residue comprising a source of liquid water, a transport line, and a spray nozzle.

Regarding claim 42, it has been held that optimization of ranges is not an inventive step. See MPEP 2144.05.

Regarding claim 42, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Adams to use steam in the range of 220 and 260 °F. Adams does not specify the conditions of the steam, but the claimed range of temperatures in the instant application is within the range of temperatures that steam encompasses. One having ordinary skill in the art would recognize that it would be advantageous to optimize the temperature range of the steam to provide optimal cleaning while not requiring too much energy or cost to heat the steam, and one having ordinary skill in the art could easily determine through the course of routine experimentation that the optimal range of temperatures for the steam is between 220 and 260 °F.

Further regarding claim 42, Holmes teaches a steam cleaning apparatus which allows the operator to select a wide variety of steam/water mixes, including 10% water (col. 1, lines 25-34).

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Further regarding claim 42, it would have been obvious to one having ordinary skill in the art at the time the invention was made to additionally modify Adams to use a wet steam mixture of up to 10% water, because Holmes teaches that it is well known in the art to use wet steam for cleaning, and one having ordinary skill would recognize the advantages of using wet steam, such as the rinsing effect the water would have on the object being cleaned.

Further regarding claim 42, Arant teaches a method of steam cleaning and liquid rinsing, including: the further step of directing a stream liquid water onto said surfaces after said step of directing a jet of said pressurized steam (col. 8, lines 42-49); a means for directing at least one stream of liquid water (79, Fig. 1) onto said surfaces to rinse away said dried ink and other material residue; wherein said means for directing at least one stream of liquid water includes a source of liquid water, a transport line, and a spray nozzle (79, 11, Fig. 1).

Further regarding claim 42, it would have been obvious to one having ordinary skill in the art at the time the invention was made to additionally modify Adams to direct a stream of water onto the anilox roller to rinse away dried ink, because Arant teaches that it is well known in the art to rinse objects after being steam cleaned, and one having ordinary skill in the art would recognize the advantages of rinsing after steam cleaning, such as removal of any particles that were not sufficiently rinsed away by the wet steam cleaning.

4. Claims 37, 43, and 44a are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Holmes and Arant as applied to claims 36 and 42 above, and further in view of Sondergeld et al., US 5,911,175.

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Regarding claim 37, the combination of Adams, Holmes, and Arant teaches all that is claimed as discussed in the rejection of claim 36 above, except the further step of providing a surfactant or degreasing compound on the surfaces of said anilox roller before said step of directing a jet of said pressurized steam.

Regarding claim 37, Sondergeld teaches a method of cleaning a printing machine cylinder surface including: effectively cleaning a printing machine cylinder having surface structures with surface valleys (col. 1, lines 40-41); washing the surface with a cleaning fluid, which preferably is water or steam (col. 1, lines 53-54); a high pressure washing device adapted for directing a cleaning fluid to the surface (col. 2, lines 50-52); the further step of providing a surfactant on the surfaces of said roller before said step of directing a jet of said pressurized steam (col. 2, lines 56-61); that such a cleaning method is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks (col. 1, lines 36-38).

Regarding claim 37, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to include the step of providing a surfactant or degreasing compound on the surfaces of said anilox roller before said step of directing a jet of said pressurized steam, because Sondergeld teaches that such a method is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks.

Regarding claim 43, the combination of Adams, Holmes, and Arant teaches all that is claimed as discussed in the rejection of claim 42 above, except including a means for directing at least one stream of surfactant or degreasing compound onto the surfaces of said anilox roller.

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Regarding claim 43, Sondergeld teaches a method of cleaning a printing machine cylinder surface including: effectively cleaning a printing machine cylinder having surface structures with surface valleys (col. 1, lines 40-41); washing the surface with a cleaning fluid, which preferably is water or steam (col. 1, lines 53-54); a high pressure washing device adapted for directing a cleaning fluid to the surface (col. 2, lines 50-52); the further step of providing a surfactant on the surfaces of said roller before said step of directing a jet of said pressurized steam (col. 2, lines 56-61); that such a cleaning method is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks (col. 1, lines 36-38).

Regarding claim 43, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to include the means for providing a surfactant or degreasing compound on the surfaces of said anilox roller before said step of directing a jet of said pressurized steam, because Sondergeld teaches that such an apparatus is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks.

Regarding claim 44a, the combination of Adams, Holmes, Arant, and Sondergeld teaches all that is claimed as discussed in the rejection of claim 43 above, except wherein said means for directing at least one stream of surfactant or degreasing compound includes a source thereof, a transport line, and an applicator nozzle.

Regarding claim 44a, Sondergeld teaches a method of cleaning a printing machine cylinder surface including: effectively cleaning a printing machine cylinder having surface structures with surface valleys (col. 1, lines 40-41); washing the surface with a cleaning fluid, which preferably is

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water or steam (col. 1, lines 53-54); a high pressure washing device adapted for directing a cleaning fluid to the surface (col. 2, lines 50-52); the further step of providing a surfactant on the surfaces of said roller before said step of directing a jet of said pressurized steam (col. 2, lines 56-61); that such a cleaning method is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks (col. 1, lines 36-38).

Regarding claim 44a, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said means for directing at least one stream of surfactant or degreasing compound includes a source thereof, a transport line, and an applicator nozzle, because Sondergeld teaches that such an apparatus is effective for cleaning a printing machine cylinder surface of strongly adhering dirt, such as paper dust or hardened printing inks.

5. Claims 38-41, 44b-47, and 50-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Holmes and Arant as applied to claims 36 and 42 above, and further in view of Gydesen, US 5,644,986.

Regarding claim 38, the combination of Adams, Holmes, and Arant teaches all that is claimed as discussed in the rejection of claim 36 above, except collecting the removed ink and other material residue from said roller via gravity-fed liquid collection, vacuum collection, or both.

Regarding claim 38, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the

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methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 38, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to include a method for collecting the removed ink and other material residue from said roller via vacuum collection, because Gydesen teaches that such a method is advantageous for performing cleaning while the printing process is running.

Regarding claim 39, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 38 above except wherein said removed ink and other material residue are collected from said roller via vacuum collection.

Regarding claim 39, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 39, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said removed ink and other material residue are collected from said roller via vacuum collection, because Gydesen teaches that such a method is advantageous for performing cleaning while the printing process is running.

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Regarding claim 40, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 38 above except transporting the collected ink and other material residue to a disposal system.

Regarding claim 40, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 40, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams by transporting the collected ink and other material residue to a disposal system, because Gydesen teaches that such a method is advantageous for performing cleaning while the printing process is running.

Regarding claim 41, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 40 above except disposing of said collected ink and other material residue.

Regarding claim 41, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the

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methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 41, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams by disposing of said collected ink and other material residue, because Gydesen teaches that such a method is advantageous for performing cleaning while the printing process is running.

Regarding claim 44b, the combination of Adams, Holmes, and Arant teaches all that is claimed as discussed in the rejection of claim 42 above, except means for collecting said removed ink and other material residue from said anilox roller.

Regarding claim 44b, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 44b, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to include means for collecting said removed ink and other material residue from said anilox roller, because Gydesen teaches that such means are advantageous for performing cleaning while the printing process is running.

Regarding claim 45, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 44b above, except wherein said means for collecting said

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removed ink and other material residue from said anilox roller comprises at least one of a vacuum collection system, a gravity-fed liquid collection system, or both in combination.

Regarding claim 45, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 45, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to wherein said means for collecting said removed ink and other material residue from said anilox roller comprises at least one of a vacuum collection system, because Gydesen teaches that such means are advantageous for performing cleaning while the printing process is running.

Regarding claim 46, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 45 above, except wherein said means for collecting said removed ink and other material residue from said anilox roller comprises a vacuum collection system.

Regarding claim 46, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the

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methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 46, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to wherein said means for collecting said removed ink and other material residue from said anilox roller comprises a vacuum collection system, because Gydesen teaches that such means are advantageous for performing cleaning while the printing process is running.

Regarding claim 47, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 46 above, except wherein said vacuum collection system includes at least one vacuum port and at least one vacuum waste disposal line.

Regarding claim 47, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a method (col. 3, lines 34-44) and apparatus for collecting, transporting, and disposing removed ink from said roller via vacuum collection, including at least one vacuum port (25, Fig. 2) and one vacuum waste disposal line (14, Fig. 1) (claims 38-41 and 44b-47); and that the methods and apparatus are advantageous for cleaning automatically and while the printing process is running, and for reducing the amount of time for the cleaning process (col. 3, lines 2-7).

Regarding claim 47, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said vacuum collection system includes at least one vacuum port and at least one vacuum waste disposal line, because Gydesen teaches that such means are advantageous for performing cleaning while the printing process is running.

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Regarding claim 50, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 46 above, except wherein said means for directing at least one jet of high pressure steam onto the surface of said anilox roller and said vacuum collection system are combined into a single cleaning head.

Regarding claim 50, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including wherein said means for directing at least one jet of high pressure media onto the surface of said anilox roller and said vacuum collection system are combined into a single cleaning head (5, Fig. 1).

Regarding claim 50, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said means for directing at least one jet of high pressure steam onto the surface of said anilox roller and said vacuum collection system are combined into a single cleaning head, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

Regarding claim 51, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 50 above, except wherein said cleaning head is adapted to raster-scan the length of the anilox roller as it cleans the roller.

Regarding claim 51, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including wherein said cleaning head is adapted to raster-scan the length of the roller (1, Fig. 1) as it cleans the roller (Fig. 1).

Regarding claim 51, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said cleaning head is adapted to

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raster-scan the length of the anilox roller as it cleans the roller, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

Regarding claim 52, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 51 above, except a traction unit for raster scanning said cleaning head.

Regarding claim 52, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including a traction unit for raster scanning said cleaning head (4, 6, 7, Fig. 1).

Regarding claim 52, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams to include a traction unit for raster scanning said cleaning head, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

Regarding claim 53, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 50 above, except wherein said cleaning head spans the entire length of the anilox roller.

Regarding claim 53, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including wherein said cleaning head spans the entire length of the anilox roller (Fig. 4).

Regarding claim 53, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said cleaning head spans the entire length of the anilox roller, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

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Regarding claim 54, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 42 above, including wherein said apparatus is a stand alone anilox roller cleaning unit (Adams, Fig. 1).

Regarding claim 55, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 50 above, except wherein said apparatus is adapted to be temporarily attached to a flexographic print machine for cleaning of the anilox roller thereof.

Regarding claim 55, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including wherein said apparatus is adapted to be attached to a flexographic print machine for cleaning of the anilox roller thereof (col. 2, lines 53-55).

Regarding claim 55, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said apparatus is adapted to be temporarily attached to a flexographic print machine for cleaning of the anilox roller thereof, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

Regarding claim 56, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 50 above, except wherein said apparatus is adapted to be permanently attached to a flexographic print machine for cleaning of the anilox roller thereof.

Regarding claim 56, Gydesen teaches a method and apparatus for cleaning a roller surface in a printing machine, including wherein said apparatus is adapted to be attached to a flexographic print machine for cleaning of the anilox roller thereof (col. 2, lines 53-55).

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Regarding claim 56, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said apparatus is adapted to be permanently attached to a flexographic print machine for cleaning of the anilox roller thereof, because Gydesen teaches that such arrangements are advantageous for reducing the amount of time used during the cleaning process.

6. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Holmes, Arant, and Gydesen as applied to claim 46 above, and further in view of Seefried, US 5,953,994.

Regarding claim 48, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 46 above, except wherein said means for collecting said removed ink and other material residue from said anilox roller comprises a gravity-fed liquid collection system.

Regarding claim 48, Seefried teaches a cleaning device for a rotary printing press, including wherein said means for collecting said removed ink and other material residue from said roller comprises a gravity-fed liquid collection system (Fig. 1), and a collecting pan allows dirty cleaning fluid to be easily collected and disposed of (col. 1, lines 50-56).

Regarding claim 48, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said means for collecting said removed ink and other material residue from said anilox roller comprises a gravity-fed liquid collection system, because Seefried teaches that a gravity-fed liquid collection system is advantageous for easily collecting and disposing of dirty cleaning fluid.

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Regarding claim 49, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 46 above, except wherein said gravity-fed liquid collection system includes at least one liquid drip pan.

Regarding claim 49, Seefried teaches a cleaning device for a rotary printing press, including wherein said gravity-fed liquid collection system includes at least one liquid drip pan (6, Fig. 1), and a collecting pan allows dirty cleaning fluid to be easily collected and disposed of (col. 1, lines 50-56).

Regarding claim 49, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said gravity-fed liquid collection system includes at least one liquid drip pan, because Seefried teaches that a drip pan is advantageous for easily collecting and disposing of dirty cleaning fluid.

7. Claims 57 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Holmes, Arant, and Gydesen as applied to claim 56 above, and further in view of Grembecki et al., US 3,309,993.

Regarding claim 57, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 56 above, except wherein said apparatus is attached to said flexographic print machine using at least one mounting bracket.

Regarding claim 57, Grembecki teaches a printing cylinder cleaner, including wherein said apparatus is attached to said flexographic print machine using at least one mounting bracket (32, Fig. 1).

Regarding claim 57, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said apparatus is attached to said

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flexographic print machine using at least one mounting bracket, because Grembecki teaches that pivoting cleaning assemblies are well known in the art, and one having ordinary skill would recognize the advantages of a pivoting assembly, such as allowing better access to the roller by pivoting the cleaning assembly out of the way.

Regarding claim 58, the combination of Adams, Holmes, Arant, and Gydesen teaches all that is claimed as discussed in the rejection of claim 56 above, except wherein said apparatus is pivotally attached to at least one mounting bracket such that the cleaning apparatus may be pivoted towards said anilox roller to clean it and pivoted away from said anilox roller when not in use .

Regarding claim 58, Grembecki teaches a printing cylinder cleaner, including wherein said apparatus is pivotally attached to at least one mounting bracket such that the cleaning apparatus may be pivoted towards said anilox roller to clean it and pivoted away from said anilox roller when not in use (col. 4, lines 6-7).

Regarding claim 58, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Adams wherein said apparatus is pivotally attached to at least one mounting bracket such that the cleaning apparatus may be pivoted towards said anilox roller to clean it and pivoted away from said anilox roller when not in use, because Grembecki teaches that pivoting cleaning assemblies are well known in the art, and one having ordinary skill would recognize the advantages of a pivoting assembly, such as allowing better access to the roller by pivoting the cleaning assembly out of the way.

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Response to Arguments

8. Applicant's arguments with respect to claims 36-58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Leo T. Hinze
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1 April, 2004

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